SEQUENCE LISTING

GENERAL INFORMATION:

APPLICANT: Janssens, Stefans Bloch, Kenneth D. Collen, Désiré

TITLE OF INVENTION: Method of Inducing Vasodilation and Treating Pulmonary Hypertension Using Adenoviral-Mediated Transfer of the Nitric Oxide Synthase Gene

- (iii) NUMBER OF SEQUENCES: 5
 - (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
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 - (C) CITY: Washington
 - (D) STATE: D.C.
 - (E) COUNTRY: U.S.A.
 - (F) ZIP: 20005
 - (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
 - (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 08/896,053
 - (B) FILING DATE: 17-JUL-1997
 - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 60/021,912
 - (B) FILING DATE: 17-JUL-1996
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Millonig, Robert C.
 - (B) REGISTRATION NUMBER: 34,395
 - (C) REFERENCE/DOCKET NUMBER: 0609.4280001/JAG/RCM
 - (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (202) 371-2600
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- (2) INFORMATION FOR SEQ ID NO:1:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:	
CGGCGATGTT ACCATGGCAA CCAACGT	27
(2) INFORMATION FOR SEQ ID NO:2:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 29 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear 	
(ii) MOLECULE TYPE: cDNA	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:	
CGGATCCCGG CTCTCAGGGG CTGTTGGTG	29
(2) INFORMATION FOR SEQ ID NO:3:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 27 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear 	
(ii) MOLECULE TYPE: cDNA	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:	
CGGCGATGTT ACCATGGCAA CCAACGT	2*
(2) INFORMATION FOR SEQ ID NO:4:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear 	
(ii) MOLECULE TYPE: cDNA	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

CTCTGTAGGT AGTTTGTCCA

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(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 4099 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

SAATTCCCAC '	TCTGCTGCCT	GCTCCAGCAG	ACGGACGCAC	AGTAACATGG	GCAACTTGAA	60
GAGCGTGGCC	CAGGAGCCTG	GGCCACCCTG	CGGCCTGGGG	CTGGGGCTGG	GCCTTGGGCT	120
GTGCGGCAAG	CAGGGCCCAG	CCACCCCGGC	CCCTGAGCCC	AGCCGGGCCC	CAGCATCCCT	180
ACTCCCACCA	GCGCCAGAAC	ACAGCCCCCC	GAGCTCCCCG	CTAACCCAGC	CCCCAGAGGG	240
GCCCAAGTTC	CCTCGTGTGA	AGAACTGGGA	GGTGGGGAGC	ATCACCTATG	ACACCCTCAG	300
CGCCCAGGCG	CAGCAGGATG	GGCCCTGCAC	CCCAAGACGC	TGCCTGGGCT	CCCTGGTATT	360
TCCACGGAAA	CTACAGGGCC	GGCCCTCCCC	CGGCCCCCG	GCCCTGAGC	AGCTGCTGAG	420
TCAGGCCCGG	GACTTCATCA	ACCAGTACTA	CAGCTCCATT	AAGAGGAGCG	GCTCCCAGGC	480
CCACGAACAG	CGGCTTCAAG	AGGTGGAAGC	CGAGGTGGCA	GCCACAGGCA	CCTACCAGCT	540
TAGGGAGAGC	GAGCTGGTGT	TCGGGGCTAA	GCAGGCCTGG	CGCAACGCTC	CCCGCTGCGT	600
GGGCCGGATC	CAGTGGGGGA	AGCTGCAGGT	GTTCGATGCC	CGGGACTGCA	GGTCTGCACA	660
GGAAATGTTC	ACCTACATCT	GCAACCACAT	' CAAGTATGCC	ACCAACCGGG	GCAACCTTCG	720
CTCGGCCATC	ACAGTGTTCC	: CGCAGCGCTG	CCCTGGCCGA	GGAGACTTCC	GAATCTGGAA	780
CAGCCAGCTG	GTGCGCTACG	: CGGGCTACCG	GCAGCAGGAC	GGCTCTGTGC	GGGGGGACCC	840
AGCCAACGTG	GAGATCACCG	AGCTCTGCAT	TCAGCACGGC	TGGACCCCAG	GAAACGGTCG	900
CTTCGACGTG	CTGCCCCTGC	TGCTGCAGG	C CCCAGATGAG	CCCCCAGAAC	CTCTTCCTTCT	960
GCCCCCGAG	CTGGTCCTTC	AGGTGCCCC	r ggagcaccc	C ACGCTGGAGT	GGTTTGCAGC	1020
ССТСССССТС	CGCTGGTAC	G CCCTCCCGG	C AGTGTCCAA(C ATGCTGCTGC	AAATTGGGGG	1080



CCTGGAGTTC CCCGCAGCCC CCTTCAGTGG CTGGTACATG AGCACTGAGA TCGGCACGAG 1140 GAACCTGTGT GACCCTCACC GCTACAACAT CCTGGAGGAT GTGGCTGTCT GCATGGACCT 1200 GGATACCCGG ACCACCTCGT CCCTGTGGAA AGACAAGGCA GCAGTGGAAA TCAACGTGGC 1260 CGTGCTGCAC AGTTACCAGC TAGCCAAAGT CACCATCGTG GACCACCACG CCGCCACGGC 1320 CTCTTTCATG AAGCACCTGG AGAATGAGCA GAAGGCCAGG GGGGGCTGCC CTGCAGACTG 1380 GGCCTGGATC GTGCCCCCCA TCTCGGGCAG CCTCACTCCT GTTTTCCATC AGGAGATGGT 1440 CAACTATTTC CTGTCCCCGG CCTTCCGCTA CCAGCCAGAC CCCTGGAAGG GGAGTGCCGC 1500 CAAGGGCACC GGCATCACCA GGAAGAAGAC CTTTAAAGAA GTGGCCAACG CCGTGAAGAT 1560 CTCCGCCTCG CTCATGGGCA CGGTGATGGC GAAGCGAGTG AAGGCGACAA TCCTGTATGG 1620 CTCCGAGACC GGCCGGGCCC AGAGCTACGC ACAGCAGCTG GGGAGACTCT TCCGGAAGGC 1680 TTTTGATCCC CGGGTCCTGT GTATGGATGA GTATGACGTG GTGTCCCTCG AACACGAGAC 1740 GCTGGTGCTG GTGGTAACCA GCACATTTGG GAATGGGGAT CCCCCGGAGA ATGGAGAGAG 1800 CTTTGCAGCT GCCCTGATGG AGATGTCCGG CCCCTACAAC AGCTCCCCTC GGCCGGAACA 1860 GCACAAGAGT TATAAGATCC GCTTCAACAG CATCTCCTGC TCAGACCCAC TGGTGTCCTC 1920 TTGGCGGCGG AAGAGGAAGG AGTCCAGTAA CACAGACAGT GCAGGGGCCC TGGGCACCCT 1980 CAGGTTCTGT GTGTTCGGGC TCGGCTCCCG GGCATACCCC CACTTCTGCG CCTTTGCTCG 2040 TGCCGTGGAC ACACGGCTGG AGGAACTGGG CGGGGAGCGG CTGCTGCAGC TGGGCCAGGG 2100 CGACGAGCTG TGCGGCCAGG AGGAGGCCTT CCGAGGCTGG GCCCAGGCTG CCTTCCAGGC 2160 CGCCTGTGAG ACCTTCTGTG TGGGAGAGGA TGCCAAGGCC GCCGCCCGAG ACATCTTCAG 2220 CCCCAAACGG AGCTGGAAGC GCCAGAGGTA CCGGCTGAGC GCCCAGGCCG AGGGCCTGCA 2280 GTTGCTGCCA GGTCTGATCC ACGTGCACAG GCGGAAGATG TTCCAGGCTA CAATCCGCTC 2340 AGTGGAAAAC CTGCAAAGCA GCAAGTCCAC GAGGGCCACC ATCCTGGTGC GCCTGGACAC 2400 CGGAGGCCAG GAGGGGCTGC AGTACCAGCC GGGGGACCAC ATAGGTGTCT GCCCGCCCAA 2460 CCGGCCCGGC CTTGTGGAGG CGCTGCTGAG CCGCGTGGAG GACCCGCCGG CGCCCACTGA 2520 GCCCGTGGCA GTAGAGCAGC TGGAGAAGGG CAGCCCTGGT GGCCCTCCCC CCGGCTGGGT 2580 GCGGGACCCC CGGCTGCCCC CGTGCACGCT GCGCCAGGCT CTCACCTTCT TCCTGGACAT 2640 CACCTCCCCA CCCAGCCCTC AGCTCTTGCG GCTGCTCAGC ACCTTGGCAG AAGAGCCCAG 2700 GGAACAGCAG GAGCTGGAGG CCCTCAGCCA GGATCCCCGA CGCTACGAGG AGTGGAAGTG 2760

01

GTTCCGCTGC CCCACGCTGC TGGAGGTGCT GGAGCAGTTC CCGTCGGTGG CGCTGCCTGC 2820 CCCACTGCTC CTCACCCAGC TGCCTCTGCT CCAGCCCCGG TACTACTCAG TCAGCTCGGC 2880 ACCCAGCACC CACCCAGGAG AGATCCACCT CACTGTAGCT GTGCTGGCAT ACAGGACTCA 2940 GGATGGGCTG GGCCCCTGC ACTATGGAGT CTGCTCCACG TGGCTAAGCC AGCTCAAGCC 3000 CGGAGACCCT GTGCCCTGCT TCATCCGGGG GGCTCCCTCC TTCCGGCTGC CACCCGATCC 3060 CAGCTTGCCC TGCATCCTGG TGGGTCCAGG CACTGGCATT GCCCCCTTCC GGGGATTCTG 3120 GCAGGAGCGG CTGCATGACA TTGAGAGCAA AGGGCTGCAG CCCACTCCCA TGACTTTGGT 3180 GTTCGGCTGC CGATGCTCCC AACTTGACCA TCTCTACCGC GACGAGGTGC AGAACGCCCA 3240 GCAGCGCGGG GTGTTTGGCC GAGTCCTCAC CGCCTTCTCC CGGGAACCTG ACAACCCCAA 3300 GACCTACGTG CAGGACATCC TGAGGACGGA GCTGGCTGCG GAGGTGCACC GCGTGCTGTG 3360 CCTCGAGCGG GGCCACATGT TTGTCTGCGG CGATGTTACC ATGGCAACCA ACGTCCTGCA 3420 GACCGTGCAG CGCATCCTGG CGACGGAGGG CGACATGGAG CTGGACGAGG CCGGCGACGT 3480 CATCGGCGTG CTGCGGGATC AGCAACGCTA CCACGAAGAC ATTTTCGGGC TCACGCTGCG 3540 CACCCAGGAG GTGACAAGCC GCATACGCAC CCAGAGCTTT TCCTTGCAGG AGCGTCAGTT 3600 GCGGGGCGCA GTGCCCTGGG CGTTCGACCC TCCCGGCTCA GACACCAACA GCCCCTGAGA 3660 GCCGCCTGGC TTTCCCTTCC AGTTCCGGGA GAGCGGCTGC CCGACTCAGG TCCGCCCGAC 3720 CAGGATCAGC CCCGCTCCTC CCCTCTTGAG GTGGTGCCTT CTCACATCTG TCCAGAGGCT 3780 GCAAGGATTC AGCATTATTC CTCCAGGAAG GAGCAAAACG CCTCTTTTCC CTCTCTAGGC 3840 CTGTTGCCTC GGGCCTGGGT CCGCCTTAAT CTGGAAGGCC CCTCCCAGCA GCGGTACCCC 3900 AGGGCCTACT GCCACCGCT TCCTGTTTCT TAGTCCGAAT GTTAGATTCC TCTTGCCTCT 3960 CTCAGGAGTA TCTTACCTGT AAAGTCTAAT CTCTAAATCA AGTATTTATT ATTGAAGATT 4020 TACCATAAGG GACTGTGCCA GATGTTAGGA GAACTACTAA AGTGCCTACC CCAGCTCAAA 4080 AAAAAAAA AAAAAAAA 4099-

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